

STEREO MOC Status Report  
Time Period: 2007:071 - 2007:077

STEREO Ahead (STA) Status:

1. The following Ground System events and anomalies occurred during this reporting period:

- On day 073, the SSR playback start and stop times, along with the BOT and EOT times loaded to the spacecraft were incorrect. This was the result of the Scheduling software reverting back to an earlier version, which did not have a fix for changed BOT/EOT times, when the DST patch was applied to the system. All SSR data was recovered on this track.
- On day 074, the track with DSS-45 was shortened by 1 hour and 40 minutes due to a request granted to MRO for anomaly resolution. Due to the shortened track, the last 40 minutes of SSR data was not recovered (18% of SECCHI partition 19 and 40% of SECCHI partition 20.) Some of this data was recovered in the following days tracks.
- On day 077 the SECCHI Special Event partition was not completely played back. The partition was 100% full at the start of the track and there was 3% still not played back at the end of the track.

2. Ahead spacecraft performance continues to be very good with all subsystems performing nominally. The following special spacecraft/instrument events and anomalies occurred during this week:

- The average daily SSR playback volume for Ahead was 6.590 Gbits during this week.
- On day 072 the SECCHI HI 90/270 degree roll calibration was conducted. This event was conducted simultaneously with the Behind Spacecraft.
- On day 072 the G&C software was patched in RAM to correct IMU telemetry in the Standby packet.
- On day 073 the third HGA Calibration was successfully conducted. Ranging was disabled during this event to allow for accurate reading of the received downlink power from the DSN station.

- On day 074 the SECCHI HI Cross 180 Degree Roll Calibration was conducted. This event was run concurrently with the Behind Spacecraft.
- On day 077, SECCHI experienced a watchdog timer reset of the SECCHI DPU.

STEREO Behind (STB) Status:

1. The following Ground System anomaly occurred during this reporting period:

- On day 75, command was delayed at the start of the track by about 5 minutes due to the transmitter tripping off at DSS-45 5 minutes after BOT. This late command link had no effect on the track objectives.

2. Behind spacecraft performance continues to be very good with all subsystems performing nominally. The following special spacecraft/instrument events and anomalies occurred during this week:

- The average daily SSR playback volume for Behind was 7.251 Gbits during this week.
- On day 071 the third HGA Calibration was conducted. The received downlink power from station DSS-54 did not reflect what was expected by the RF engineer. IAW the DSN, SNT was enabled and the data was improved, but still not sufficient for this calibration event. The DSN recommended that this event not be conducted with the XMASER, so this will not be scheduled in the future. The HGA Calibration run on day 073 on Ahead was conducted on an HEMT vice the XMASER, with SNT enabled and ranging off and the expected downlink power was received. This configuration will be used in the future for all HGA Calibrations.
- On day 072 the SECCHI HI 90/270 Degree Roll Calibration was conducted. This event was conducted simultaneously with the Ahead Spacecraft.
- On day 072 the G&C software was patched in RAM to correct IMU telemetry in the Standby packet.
- On day 074 the SECCHI HI Cross 180 Degree Roll Calibration was conducted. This event was run concurrently with the Ahead Spacecraft.

- On day 074 the G&C thruster set A deadzone parameter was updated in RAM to allow better HGA pointing through momentum dumps.
- On day 075 the G&C Wheel Speed Avoidance parameter was adjusted in RAM.
- On day 075 IMPACT loaded new firmware to LET.